# Ecotox Report for Case # P-18-0054

## General

| | | | |
|---|---|---|---|
| **CBI:** | [redacted] | **Report Status:** | Complete |
| **Status Date:** | 11/21/2018 | **CRSS Date:** | 12/04/2017 |
| **SAT Date:** | 12/05/2017 | **SAT Chair:** | T. Behrsing |
| **Consolidated PMN:** | N | **Consolidated Set:** | |
| **Ecotox Related Cases:** | | | |
| **Health Related Cases:** | | | |
| **Submitter:** | [redacted] | | |
| **CAS Number:** | [redacted] | | |
| **Chemical Name:** | [redacted] | | |
| **Use:** | [redacted] Polymer Exemption case (E1). All analogs are | | |
| **Trade Name:** | [redacted] | | |
| **PV-max(kg/yr):** | [redacted] | **Ecotox Assessor:** | Muneer, Alie |

## Fate Summary Statement

| | |
|---|---|
| **Fate Summary Statement:** | P-18-0054<br>FATE: [redacted]<br>Solid<br>S =<br>Negl.<br>VP < 1.0E-6 torr at 25 °C (E)<br>BP > 400 °C (E)<br>H<br>< 1.00E-8 (E)<br>POTW removal (%) = 90 via sorption<br>Time for |

complete ultimate aerobic biodeg > mo
Sorption to soils/sediments =
v.strong
PBT Potential: P3B1
*CEB FATE: Migration to ground water
= negl

## Physical Chemical Information

| | | | |
|---|---|---|---|
| **Molecular Weight:** | [redacted] | | |
| **Wt% < 500:** | [redacted] | **Wt% < 1000:** | [redacted] |
| **Physical State - Neat:** | Solid (est) | | |
| **Melting Point:** | | **Melting Point (est):** | |
| **MP (EPI):** | | | |
| **Vapor Pressure:** | | **Vapor Pressure (est):** | <0.000001 |
| **VP (EPI):** | | | |
| **Water Solubility:** | | **Water Solubility (est):** | <0.000001 |
| **Water Solubility (EPI):** | | | |
| **Henry's Law::** | | | |
| **Log Koc:** | | **Log Koc (EPI):** | |
| **Log Kow:** | | **Log Kow (EPI):** | |
| **Log Kow Comment:** | | | |

## SAT Concern Level

| | |
|---|---|
| **Ecotox Rating (1):** | 1 |
| **Ecotox Rating Comment (1):** | |
| **Ecotox Rating (2):** | |
| **Ecotox Rating Comment (2):** | |
| **Ecotox Route of Exposure:** | No releases to water |

## Ecotox Comments

| | |
|---|---|
| **Exposure Based Review (Eco):** | N |
| **Ecotox Comments:** | |
| **Exposure Based Testing:** | |

## PBT Ratings

| Persistence | Bioaccumulation | Toxicity | Comments |
|---|---|---|---|
| 3 | 1 | 2 | |

## Eco-Toxicity Comment:

## Fate Ratings

**Removal in WWT/POTW (Overall):** 90

| Condition | Rating Values | Rating Description 1 | 2 | 3 | 4 | Comment |
|---|---|---|---|---|---|---|
| **Fish BCF:** | | | | | | |
| **Log Fish BCF:** | | | | | | |
| **WWT/POTW Sorption:** | 3 | Low | Moderate | Strong | V. Strong | |
| **WWT/POTW Stripping:** | 4 | Extensive | Moderate | Low | Negligible | |
| **Biodegradation Removal:** | 4 | Unknown | High | Moderate | Negligible | |
| **Biodegradation Destruction:** | | Unknown | Complete | Partial | — | |
| **Aerobic Biodeg Ult:** | 4 | <= Days | Weeks | Months | > Months | |
| **Aerobic Biodeg Prim:** | | <= Days | Weeks | Months | > Months | |
| **Anaerobic Biodeg Ult:** | 4 | <= Days | Weeks | Months | > Months | |
| **Anaerobic Biodeg Prim:** | | <= Days | Weeks | Months | > Months | |
| | | | Hours | Days | >= Months | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Removal in WWT/POTW (Overall):** | 90 | | | | | |
| **Condition** | **Rating Values** | **Rating Description** **1** | **2** | **3** | **4** | **Comment** |
| **Hydrolysis (t1/2 at pH 7,25C) A:** | | <= Minutes | | | | |
| **Hydrolysis (t1/2 at pH 7,25C) B:** | | <= Minutes | Hours | Days | >= Months | |
| **Sorption to Soils/Sediments:** | 1 | V. Strong | Strong | Moderate | Low | |
| **Migration to Ground Water:** | 1 | Negligible | Slow | Moderate | Rapid | |
| **Photolysis A, Direct:** | | Negligible | Slow | Moderate | Rapid | |
| **Photolysis B, Indirect:** | | Negligible | Slow | Moderate | Rapid | |
| **Atmospheric Ox A, OH:** | | Negligible | Slow | Moderate | Rapid | |
| **Atmospheric Ox B, O3:** | | Negligible | Slow | Moderate | Rapid | |
| **Bio Comments:** | | | | | | |
| **Fate Comments:** | | | | | | |

## Ecotoxicity Values

| **Test organism** | **Test Type** | **Test Endpoint** | **Predicted** | **Experimental** | **Comments** |
|---|---|---|---|---|---|
| **Fish** | 96-h | LC50 | * | | |
| **Daphnid** | 48-h | LC50 | * | | |
| **Green Algae** | 96-h | EC50 | * | | |
| **Fish** | - | Chronic Value | * | | |
| **Daphnid** | - | Chronic Value | * | | |
| **Green Algae** | - | Chronic Value | * | | |

**Ecotox Value Comments:** Predictions are based on SARs for nonionic polymers; [redacted]; solid (est.) with an unknown MP (P); S = negligible (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO3; and TOC <2.0 mg/L.

## Ecotox Factors

| Factors | Most Sensitive Endpoint | Assessment Factor | CoC | Comment |
|---|---|---|---|---|
| **Acute Aquatic (ppb):** | | 5/10 | | * |
| **Chronic Aquatic (ppb):** | | | | * |

| Factors | Values | Comments |
|---|---|---|
| **SARs:** | Nonionic Polymers | |
| **SAR Class:** | Nonionic Polymers-insoluble | |
| **TSCA NCC Category?** | None | |

**Recommended Testing:**

**Ecotox Factors Comments:** Environmental Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risks because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA estimated environmental hazard of this new chemical substance using hazard data on analogous chemicals. Based on hazard data on analogous chemicals, EPA concludes that this chemical substance has low environmental hazard.

· Substance does not fall within a TSCA New Chemicals Category.

· SAR analogs for nonionic polymers.
· Low hazard based on an estimate of no effects at saturation.

Environmental Risks:
·
Risks were not identified for ecotoxicity.

Testing Recommendations:
· No testing recommended.

## Comments/Telephone Log

| Artifact | Update/Upload Time |
| --- | --- |